SARB Action Item List Reference Manual

1.0 General Information

The SARB Working Group is responsible for delivering production software to the ASDC for three subsystems. These subsystems are the Instantaneous SARB Subsystem, the Synoptic SARB Subsystem, and the Regrid MOA Subsystem. The Instantaneous and Synoptic SARB Subsystems share a library of software referred to as SARBlib.

Action item lists are maintained as a means of documenting progress on requirements for deliveries of the production software to the ASDC operational environment. At a minimum, the progress on all requirements identified in the SARB Requirements Logs (http://asd-www.larc.nasa.gov/ceres/requirements_logs/) are tracked in the action item lists.

The SARB action item list files also contain emails that document requirements. The emails included are those that initiate the requirements, provide clarifications or corrections, and document the completion of implementing the requirements. The SARB Working Group's lists therefore do not only track progress, but also serve as a historical reference for the modifications.

1.1 Action Item List to Subsystem Mapping

There is an action item list for each of the three SARB subsystems:

- Regrid MOA
- Instantaneous SARB
- Synoptic SARB

SARBlib action items are included with the list for the subsystem that is scheduled to include the action item with a software delivery first. There is no separate action item list for SARBlib.

1.2 Action Item List to Production Software Delivery Mapping

A single action item list is maintained for each delivery of source code intended for production processing to the ASDC operational environment. Delta deliveries that include only scripts do not require an action item list.

1.3 Action Item List Status

An action item list is open until the delivery has been released to the ASDC. The status is indicated in the page header. Once the delivery is released to the ASDC by the CERES CM Team, the status of the list is closed. New items are not added to closed action item lists.

1.4 Action Item List Filenames

Changes to the Instantaneous and Synoptic SARB Subsystem are driven by requirements internal to the CERES project. The name of the file containing the list for a subsystem reflects the first dataset intended for production processing with the delivery. Examples of filenames include:

- CRS_AquaEd2A for a delivery of the Instantaneous SARB Subsystem to produce the Aqua Edition2A CRS dataset
- CRS_Ed3 for a delivery of the Instantaneous SARB Subsystem to produce the Edition3 CRS dataset for any CERES satellite
- SYN_TerraEd2B for a delivery of the Synoptic SARB Subsystem to produce the Terra Edition2B SYNI dataset

Changes to the Regrid MOA Subsystem are typically driven by changes external to the CERES project. These changes may include changes to the operational environment or the externally provided input data. The filename for the Regrid MOA Subsystem Action Item list reflects the change driving the delivery. The following is an example of a filename for a Regrid MOA Subsystem Action Item list.

• MOA_OpenSource for a delivery of the Regrid MOA Subsystem software converted to process in either the Linux or SGI environments.

1.5 Communication of Action Item Lists

The SARB Action Item Lists are displayed on the SARB Action Item List Web site (http://asd-www.larc.nasa.gov/sarb). Both closed and open lists are available from the Web site.

1.6 Action Item List Maintenance Responsibility

The DMT members of the SARB Working Group are responsible for maintaining the SARB Action Item Lists and communicating to each other via email when a list has been updated..

2.0 SARB Action Item List Organization

Each SARB Action Item lists is organized as follows:

- Table 1 Identifies general information pertaining to the software delivery associated with the action item list
- Table 2 Identifies the action items and the associated email documentation
- Emails documenting the progress for each action item identified in Table 2.

In addition to the above sections, the page header indicates the open or closed status of the action item list. The page footer indicates the location of the editable version of the action item list and the date of the last update to the list. The possibilities for the status that appears in the header for a list are the following:

- · Action Item List Status: On-going, delivery not complete
- Action Item List Status: All Action Items completed. This list now CLOSED.

2.1 SARB Action Item List Table 1 Contents

Table 1 of the SARB action item lists contains general information related to the delivery of production software to the ASDC. The information in Table 1 identifies information that is needed for the SCCR and Delivery Memo that accompany a given delivery. An example of Table 1 and instructions for defining the information it contains follows.

Table 1: EXAMPLE - General Instantaneous SARB Aqua Edition2A Delivery Information

Row Number	Information Description	Detail
1	Scheduled Delivery Date	November 18, 2005
2	SCCR number	597
3	Software Included in delivery package	Instantaneous SARB unique code
		SARBlib
4	CERESlib Delivery	N/A
5	SARB PGE(s) included in delivery	CER5.0P1 CER5.1P2 (new PGE) CER5.4P2 (new PGE)
6	Sample Read Package	Continue with Terra Ed2B and Aqua Beta1 sample read package currently distributed with orders
7	Other Affected Subsystems	N/A
8	Documentation Updates	Test Plan Operator's Manual

Jim Donaldson Henry Flippo Danny Mangosing

Row Number	Information Description	Detail
9	Subject Matter Experts	SCIENCE TEAM (ST): Tom Charlock Fred Rose Dave Rutan Wenying Su LINUX CONVERSION:

Table 1: EXAMPLE - General Instantaneous SARB Aqua Edition2A Delivery Information

This example may be copied into an action item list and modified. The two left most columns are standard and should not change. The right most column contains the information that varies with each software delivery. The following are the definitions for the variable information contained in Table 1.

- Table Title Indicates specific SARB subsystem and specific delivery. The specific delivery in the table title should correspond to the filename for the action item list.
- Row 1 Indicates the scheduled date of the software delivery to CM. This date should match the date on the CERES Delivery Schedule available form the CERES DMT status Web site (http://asd-www.larc.nasa.gov/dms/dmtm.html).
- Row 2 Number of SCCR associated with delivery
- Row 3 Identifies subsystem software covered by action item list. Possibilities include:
 - Instantaneous SARB unique code
 - Synoptic SARB unique code
 - SARBlib
 - Regrid MOA code
- Row 4 Indicates whether or not a CERESlib delivery is also needed
- Row 5 Lists each PGE that is impacted by the delivery and must therefore undergo SSI&T testing. These PGEs are also the same ones that need to be listed in the SCCR as affected subsystems
- Row 6 Indicates if a new sample read package is necessary, or identifies the existing sample read package that can be used with the delivery.
- Row 7 Lists non-SARB subsystems that are affected by the delivery
- Row 8 Lists which SARB documents need to be updated with the delivery. The possible documents are:
 - Test Plan
 - Operator's Manual
 - Data Products Catalog
- Row 9 Identifies those with expertise on the delivery requirements that can be consulted as needed for questions and verification issues.

2.2 SARB Action Item List Table 2 Contents

Table 2 of the SARB action item lists identifies the action items that must be completed prior to the delivery of the software and tracks the progress of these items. At a minimum, Table 2 should track the progress of the requirements listed in the SARB requirements log. As most of the information pertinent to tracking progress on the action items is obtained from the emails included with the action item list, Table 2 identifies the emails that define the requirements, provide status updates, and confirm completion. The following example may be copied into an action item list and modified.

Table 2: EXAMPLE - Instantaneous SARB Aqua Edition2A Delivery Action Items

Action Item	Requirement Definition	Status Update	Verification of completion
Implement SARB Requirement 5-1.0	Email 1. Tom Charlock, 7/28 10:18, Item #2 (included "> >>" email)	Email 9. Points to ST log of changes	Email 33. Release of delivery from CM to ASDC
	Email 10. Sets delivery date		
Implement SARB Requirement 5-1.1	Email 3., Fred Rose Item 1 (included email) Email 24. Back- ground info	Email 6. Details from ST Email 17. Status update	Email 12. Email 29.
Implement SARB Requirement 5-1.2	Email 3., Fred Rose Item 2 (included email)	Email 2. Receipt of contributed code Email 9. General status Email 19. Status - location of files for ST evaluation Email 20. Mid-way verification of direction from ST	Email 12. Email 29.
Implement SARB Requirement 5-1.3	Email 3., Fred Rose Item 3 (included email)	Email 9. General status Email 17. Status-unit test report Email 27. Directions	Email 12. Email 29.
Implement SARB Requirement 5-1.4	Email 3., Fred Rose Item 4 (included email)	Email 9. General status Email 14. Modification details from ST Email 15. Unit test in progress	Email 12. Email 29.
Implement SARB Requirement 5-1.6	Email 1. Tom Charlock, 7/28 10:18, Item #1 (included email) Email 3., Fred Rose Item 1 (included email)	Email 4. Receipt of ST code	Email 5. Removal of requirement

Table 2: EXAMPLE - Instantaneous SARB Aqua Edition2A Delivery Action Items

Action Item	Requirement Definition	Status Update	Verification of completion
Implement SARB requirement 5-2.1	Email 3., Fred Rose Item 7 (included email) Email 25. Require- ment re-stated	Email 7. (Item B) - Interface details Email 8 Requirement clarification	Email 29.
Implement SARB requirement 5-2.2	Email 3., Fred Rose Item 4 (included email)	Email 14. ST update to code provided earlier, demonstration of iterative process	Email 29.
Implement SARB requirement 5-1.8 and 5-2.4	Email 28.	Email 16. Status update Email 21. CVS update Email 22. CVS update Email 23. CVS update Email 26. General update - results ready for evaluation	Email 28.
Update Documenta- tion (Table 1, Row 8)	Routine requirement with all deliveries		Email 31. Email 33. Email 2.

2.3 SARB Action Item List Included Emails

Saved emails are crucial to maintaining a historical reference to the requirements implemented for a given delivery of SARB production software to the ASDC. Including the emails associated with a software delivery in the file with the action item list provides a historical reference in a single document.

For items included in the requirements log, there must be emails stating the requirements and confirming completion. Emails indicating intermediate status or clarifications are also included for reference, although simply implemented requirements may not generate emails indicating an intermediate status.

2.3.1 Required Emails

The following emails are required to be included in the action items list.

- Emails specifying requirements for inclusion in the software delivery affiliated with the action item list
- Emails modifying the requirements
- Emails verifying that individual requirements were implemented correctly
- Emails from the Working Group verifying that the software produces scientifically equivalent results on each platform (SGI, Linux cluster. etc.)

• Emails from the CERES DMT Documentation Team indicating that the required updates to the documentation identified in Table 1 are complete

Additional emails that clarify requirements should also be included for reference. Care should be taken that emails sections are not repeated. Frequently email dialogs include previous emails. The last email in the dialog that includes all of the relevant emails is the one that should be included in the action item list. The action item lists can become long in length and therefore there is not room for redundency.

2.3.2 Included Email Numbering

Paragraph tags should be set up for labeling and automatically numbering the emails. These paragraph tags are also necessary for cross-referencing between Table 2 and the included emails. The paragraph tag for the first included email needs to begin at the top of a new page. Sample labels are included on the last page of this documnet, and may be copied into action item lists to obtain the paragraph tag formats.

2.3.3 Cross-Referencing Between Table 2 and Emails

Emails identified within Table 2 should be identified by using the Framemaker cross-reference feature and then highlighted in blue. The instructions for using the Framemaker cross-reference feature from Table 2 are the following:

- 1. Click on the Special button
- 2. Select Cross-Reference
- 3. In the box labeled "Paragraph Tags" (left side) select Email1 if referencing the first email, or EmailN for all other emails
- 4. In the box labeled "Paragraphs" (right side), select the appropriate email message.
- 5. In the Refence box (bottom) select a format appropriate to emails. If an appropriate format is not displayed in the list, click on the Edit Format box (right side)
- 6. If editing a format
 - a. Enter "Email" in the Name box (top)
 - b. Modify existing definition to contain the building block \$paranum>
 - c. Select "Add"
 - d. Select "Done"
- 7. Select "Insert"
- 8. Highlight the email cross-reference in blue (see instructions provided in Section 2.3.5).

2.3.4 Retaining Email Sender's Contact Information

The only allowable modification to any email placed in an action item list is the removal of the routine epilogue containining the sender's address and other contact information. If the sender is

affiliated with an organization outside of Langley, the epilogue with their contact information should be maintained at least once for reference.

2.3.5 Highlighting Within Included Emails

As a group develops their requirements, long email dialogs often occur. These dialogs are rich in background information and therefore need to be included in the action item list. For purposes of writing an SCCR pertinent information within the email dialog may be highlighted in magenta. Definitive answers to questions may also be highlighted.

The instructions for highlighting are the following:

- 1. Select the text to be highlighted
- 2. Click on Format
- 3. Select Characters
- 4. Select Designer
- 5. Click on the current color
- 6. Select magenta
- 7. Click "Apply"

Email 1.

The instructions to copy this paragraph tag permanently into another document are the following:

- 1. In this document, highlight the "Email 1" paragraph above
- 2. Click on the Edit button.
- 3. Select Copy Special
- 4. Select Paragraph Format
- 5. In the target document, place cursor at targeted location.
- 6. Click on the Edit button.
- 7. Select Paste
- 8. Click on the Format button
- 9. Select Paragraphs
- 10. Select Designer
- 11. Select Commands
- 12. Select New format

Email 2.

This paragraph tag may also be copied into another document by following the instructions for the "Email 1" paragraph.